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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,696	06/20/2002	David Finn	70357	3879
23872	7590	01/26/2005		
MCGLEW & TUTTLE, PC 1 SCARBOROUGH STATION PLAZA SCARBOROUGH, NY 10510-0827			EXAMINER VU, QUANG D	
			ART UNIT 2811	PAPER NUMBER

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/019,696

Applicant(s) **JK**

FINN ET AL.

Examiner

Quang D. Vu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6,7,18,20,22 and 24-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6,7,18,20,22 and 24-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The finality of the rejection of the last Office action is withdrawn in view of the present Office action.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 6 is rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 4,151,579 to Stark.

Regarding claim 6, Stark (figures 1-2) teaches a chip module, comprising:

a chip carrier comprising a substrate formed by a carrier film (16) and connection leads (14, 15) arranged on the substrate (16), the connection leads (14, 15) comprising stripes and extend parallel over the substrate (16), the connection leads (14, 15) comprising electrically conductive connection strands arranged on the substrate (16) in a single plane and extending in a planar direction over the entire substrate surface (16) and having a longitudinal expansion flush with the substrate surface, the electrically conductive connection strands (portions of [14, 15]) being independent and separate elements from the substrate (16); and

connecting surfaces with elevated contact metallizations (27), the contact metallizations (27) being in contact with a top side of the connection strands (portions of [14, 15]) facing away from the carrier film (16).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 4,151,579 to Stark in view of US Patent No. 6,326,233 to Hashimoto.

Regarding claim 7, Stark teaches the connection strands (portions of [14, 15]) are in contact with the contact metallizations (27). Stark differs from the claimed invention by not showing the connection strands are connected with the terminals of a coil unit. However, Hashimoto (figures 7-8) teaches the conductive connections (20) are connected with the terminals of a coil unit (37, 38). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Hashimoto into the device taught by Stark in order to increase the transponder of the device.

5. Claims 18, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 4,151,579 to Stark in view of US Patent No. 5,888,429 to Lovell.

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Regarding claim 18, Stark differs from the claimed invention by not showing the carrier film and the electrically conductive strands have a flexibility to be provided in rolls. However, Lovell (figure 5) shows the carrier film (81) and the conductive strips (82) have a flexibility to be provided in rolls. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Lovell into the device taught by Stark because it is desirable to wrap the carrier film and the conductive strands in the rolled shape for connecting with the terminals of the coil unit.

Regarding claims 24-25, Stark differs from the claimed invention by not showing the carrier film and the electrically conductive strands have a flexibility to be wound in rolls. However, Lovell (figure 5) shows the carrier film (81) and the conductive strips (82) have a flexibility to be provided in rolls. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Lovell into the device taught by Stark because it is desirable to wrap the carrier film and the conductive strands in the rolled shape for connecting with the terminals of the coil unit.

6. Claims 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 4,151,579 to Stark in view of US Patent No. 5,635,751 to Ikeda et al.

Regarding claim 20, Stark (figures 1-2) teaches a chip carrier arrangement formed by the process steps comprising:

providing a carrier film (16) having a longitudinal dimension;

providing a plurality of electrically conductive connection strands (14, 15), the electrically conductive connection strands (14, 15) being provided separately and independently from the carrier film (16);

attaching electrically conductive connection strands (14, 15) onto the carrier film (16) as stripes extending substantially in parallel over the carrier film (16), the electrically conductive connection strands (14, 15) being arranged on the carrier film (16) in a substantially single plane and extending in a planar direction over the entire longitudinal dimension of the carrier film (16).

Stark differs from the claimed invention by not showing dividing the carrier film into a plurality of substrates, and the dividing being transverse to the longitudinal dimension. However, Ikeda et al. (figure 6) teach dividing the substrate (30) into a plurality of substrate, and the dividing being transverse to the longitudinal dimension. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Ikeda et al. into the device taught by Stark because it is desirable to provide an interconnection between the upper surface and the lower surface of the substrate.

Regarding claim 22, the combined device shows providing a chip (Stark; 10) with contact metallizations (Stark; 27) and connecting the contact metallizations (Stark; 27) with the electrically conductive strands (Stark; 14, 15).

7. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stark in view of Ikeda et al., and further in view of US Patent No. 3,691,628 to Kim et al.

Regarding claim 26, the disclosures of Stark and Ikeda et al. are discussed as applied to claims 20 and 22 above.

The combined device differs from the claimed invention by not showing the attaching of the electrically conductive connection strands onto the carrier film is performed with adhesive. However, Kim et al. teach the conductive strips, which are deposited on the substrate with a layer of the adhesive material (column 3, lines 33-37). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Kim et al. into the device taught by Stark and Ikeda et al. because it is desirable to hold the conductive connection strands and the carrier film in place.

8. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 4,151,579 to Stark in view of US Patent No. 6,815,251 to Akram et al.

Regarding claim 20, Stark (figures 1-2) teaches a chip carrier arrangement formed by the process steps comprising:

providing a carrier film (16) having a longitudinal dimension;

providing a plurality of electrically conductive connection strands (14, 15), the electrically conductive connection strands (14, 15) being provided separately and independently from the carrier film (16);

attaching electrically conductive connection strands (14, 15) onto the carrier film (16) as stripes extending substantially in parallel over the carrier film (16), the electrically conductive connection strands (14, 15) being arranged on the carrier film (16) in a substantially single plane and extending in a planar direction over the entire longitudinal dimension of the carrier film (16).

Stark differs from the claimed invention by not showing providing a plurality of chips with contact metallizations, connecting the contact metallizations of the plurality of chips with

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the electrically conductive strands, dividing the carrier film into a plurality of substrates, the dividing being transverse to the longitudinal dimension, the dividing being performed to place one of the plurality of chips on each of the plurality of substrates. However, Akram et al. (figures 7-8) teach a plurality of chips (12A, 12B) with contact metallizations (pads [22]), connecting the contact metallizations (pads [22]) of the plurality of the chips (12A, 12B) with the conductive connections (32B), dividing the carrier film (20) into a plurality of substrates (left [20] and right [20]), the dividing being transverse to the longitudinal dimension, the dividing being performed to place one of the plurality of chips (12A, 12B) on each of the plurality of substrates (20). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Akram et al. into the device taught by Stark since it is a known process of forming a plurality of chip into a substrate and separates a plurality of chip from each other in the final step.

9. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stark in view of Akram et al., and further in view of US Patent No. 3,691,628 to Kim et al. and US Patent No. 5,888,429 to Lovell.

Regarding claim 27, the disclosures of Stark and Akram et al. are discussed as applied to claim 28 above.

The combined device differs from the claimed invention by not showing the attaching of the electrically conductive connection strands onto the carrier film is performed with adhesive. However, Kim et al. teach the conductive strips, which are deposited on the substrate with a layer of the adhesive material (column 3, lines 33-37). Therefore, it would have been obvious to

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one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Kim et al. into the device taught by Stark and Akram et al. because it is desirable to hold the conductive connection strands and the carrier film in place.

The combine device differs from the claimed invention by not showing the carrier film and the electrically conductive strands have a flexibility to be provided in rolls. However, Lovell (figure 5) shows the carrier film (81) and the electrically conductive strands (82) have a flexibility to be provided in rolls. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Lovell into the device taught by Stark, Akram et al and Kim et al. because it is desirable to wrap the carrier film and the conductive strands in the rolled shape for connecting with the terminals of the coil unit.

Response to Arguments

Applicant's arguments with respect to claims 6-7, 18, 20, 22 and 24-28 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang D. Vu whose telephone number is 571-272-1667. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Lee can be reached on 571-272-1732. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

qv
January 11, 2005



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